

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
IP-Enabled Services)	WC Docket No. 04-36
)	
)	
To: The Commission)	

VIA the ECFS

COMMENTS OF IEEE-USA

IEEE-USA respectfully submits its comments in the above-captioned Proceeding (“the NPRM”).

These comments were developed by the IEEE-USA Committee on Communications and Information Policy and represent the considered judgment of a group of IEEE-USA members with expertise in the subject field.

IEEE-USA is an organizational unit of the IEEE. It was created in 1973 to advance the public good and promote the careers and public-policy interests of the more than 225,000 technology professionals who are U.S. members of the IEEE. The IEEE is the world's largest technical professional society. For more information, go to <http://www.ieeeusa.org>.

IEEE-USA is an interested party in this Proceeding.

INTRODUCTION

1. The Commission is to be congratulated in the preparation of its comprehensive NPRM in this Proceeding.¹ The definitions, references, and the comments of the Commissioners themselves give a comprehensive picture of the influence that the development of new Internet services is having on the current telecommunications environment. IEEE-USA feels that there are four questions where we can provide some special insight given our technical perspective.

IDENTIFICATION OF SERVICES

2. IP-based services can only be distinguished from each other on the basis of definitions of services that can be envisioned today. New services will obviously be developed in the future. Any regulation applied to existing services which is viewed as burdensome will cause new services to be developed in such a manner as to avoid the distinguishing features that would otherwise identify them as requiring regulation. This avoidance by generation of a new service, if found to be inappropriate by the FCC, would then have to be reviewed and dealt with in the open regulatory process. Such a process would severely inhibit the innovation of new services, which is the engine that is now driving the rapid development of the Internet and much of the productivity gains of the country. Further, the effort required by the developer of new services to assure compliance with certain distinguishing characteristics, is effort induced unnecessarily by the regulatory process itself, and is wasteful. We believe that all bits in an IP-based stream should be treated equally from a regulatory perspective. Any attempt to regulate some bits, but not others, based on the information they convey, will either stifle innovation in future services or, as stated above, result in “workarounds.” Content-based regulation will also result in an unnecessarily complex and burdensome regulatory framework.

¹ (FCC 04-28, Adopted February 12, 2004, Released March 10, 2004.)

REGULATING THE TRANSMISSION LAYER

3. There is value in considering the IP-Services environment from a layering point of view. No matter how the layers are defined, the bottom layer, that we will term the transmission layer, should be the only “regulated” layer. Such a distinction would leave the Commission free to establish and assure a level playing field by identifying the “transmission” layer provider as a common carrier, obligated to carry all comers and prohibited from providing content and applications. Providing open access and sufficient capacity to all would assure that competition would prevail and there would be no need to perform a complex competitive analysis in each service area. This approach is consistent with the Commission’s definition and use of the terms “Basic” and “Enhanced” services. This approach is also generally analogous to the regulatory structures now being imposed on the electric utility and pipeline industries for similar reasons.

EXPANSION OF IP SERVICES

4. Continuing the expansion of IP-Enabled services unabated will certainly impact the revenues of various elements of the Public Switched Telephone Network (“PSTN”) legacy systems and the entities that regulate them. These impacts will certainly lead to financial redistributions and revaluation of assets. The problems that arise from this continuing development should be left for legislative reform and not dealt with by regulators at this time. Any attempt to anticipate and mitigate the consequences of such a pervasive change in the method of provisioning information exchange services will have the effect of tempering the future usefulness of the IP-Enabled services that are now in their embryonic stages and would be harmful to the ultimate value of future networks and services.

ACCESS TO IP DATA STREAMS

5. There is no benefit to law enforcement in requiring providers of IP-Enabled services to provide monitoring or extraction services based on any identifiable characteristic of that service. As in our discussion at 2 above, simple “avoidance” would be used by those who would thwart the ability of law enforcement to acquire data about them. The technical means for acquiring an IP based traffic stream exists and should be the responsibility of law enforcement to acquire and evaluate based on their authorized pursuit of court orders or administrative directives. Access to IP data streams should be available to authorized law enforcement entities. It is no longer appropriate to consider a “phone tap” as the simple acquisition of voice information concerning an individual, but instead the existence of IP-based services require that all information flowing to and from an individual, in whatever form, should be sought by warrant or with judicial review, and given to the courts as appropriate.

SUMMARY AND CONCLUSION

6. We thank the Commission for the opportunity to make comments on this important topic. VoIP Services regulation is certainly an issue that is going to effect the telecommunication environment available to the American public for the next several decades. Associated issues such as CALEA and broadband access are also important and highly related to the issue of VoIP as the Commission points out.

Respectfully submitted,

/s/

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